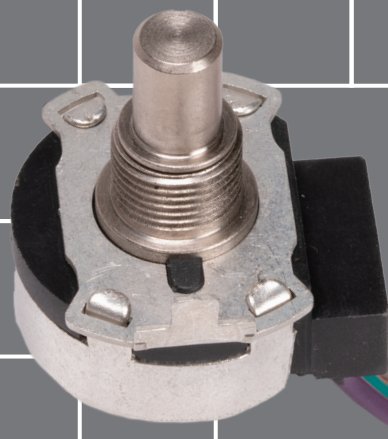


Technical Brief

Series 287 Product Brief

The Series 287 Industrial Grade Rotary Potentiometer is designed for human-to-machine applications that require a 2-watt power rating in a rugged package. With potentiometer design as a core competency, CTS is continuing to expand the portfolio with the addition of this industrial grade potentiometer. Quality, performance and reliability are core aspects of CTS rotary potentiometers.



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Smart Solutions



Industrial Grade Potentiometers

Industrial grade potentiometers require a rugged construction that can provide consistent performance in multiple environments. The Series 287 Rotary Potentiometer is constructed with a ceramic element to provide a 2-watt power rating, accurate setting and stability in a variety of environments. The ceramic substrate enables the potentiometer to effectively dissipate heat associated with high power applications while maintaining the performance, quality, and the durability expected from CTS products.

Features

- Ceramic printed element
- 2-watt power rating
- Rotational Life: 100,000 cycles
- Rotational torque: 600 ± 200 gf-cm
- Operating temperature range: -40°C to $+120^{\circ}\text{C}$
- Rugged metal shaft and bushing construction
- Seal rating: IP50 (option for IP67)
- ROHS and REACH compliant*

*ROHS3 Directive 2015/863

Amendments of Annex II on March 31, 2015.

Benefits

- High power capacity
- Extended field deployment
- Precision position setting
- Setting stability in all environments
- Suitable for use in extreme cold, hot, humid, and dusty environments
- Variety of options to fit the application
- Protection against EMI

Custom/Value Added Options

- Electrical and mechanical angle customization
- Shaft/Bushing diameter & length customization
- Custom tapers
- Custom resistance values
- Cable/connector customization
- Custom marking

(Other options available upon request)

Product Fit & Applications

This product series is best suited for industrial control applications where the reliability and durability are required, and where customers understand the value proposition of this product in the following market segments:

Industrial Equipment

- Welders
- Joystick controllers
- Portable generators
- Test and measurement equipment
- Lift & shuttle controls

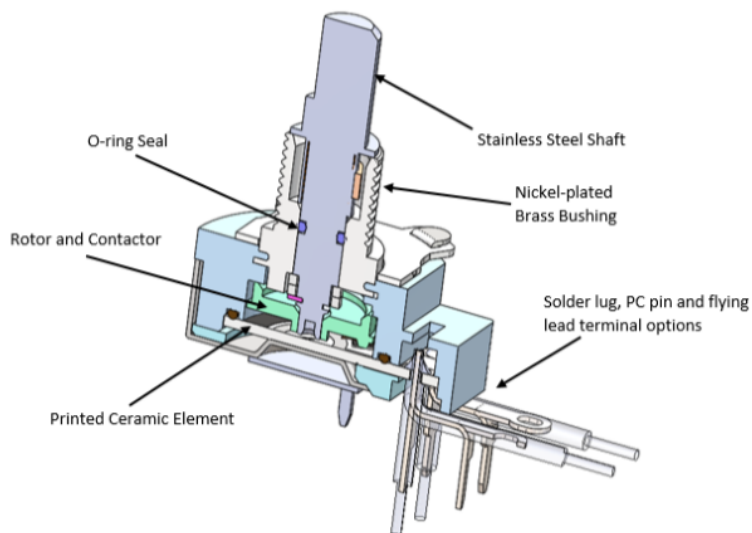
Off-Road Vehicles

- Agriculture harvesting equipment
- Combines
- Earth movers
- Construction equipment
- Cranes

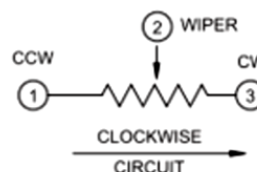
Test & Measurement

- Power supplies
- Calibration equipment
- Hi-pot testers
- Electrostatic discharge testers
- Environmental chambers

Basic Construction



Circuit Diagram



CTS (NYSE: CTS) is a leading designer and manufacturer of products that Sense, Connect and Move. CTS manufactures sensors, actuators and electronic components in North America, Europe and Asia, and supplies these products to OEMs in the aerospace, communications, defense, industrial, information technology, medical and transportation markets.

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